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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/582,864 | 07/06/2000 | KAZUHIKO TAKAHATA | 2000-0956A | 4446 |

513 7590 02/25/2005

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WASHINGTON, DC 20006-1021

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| EXAMINER |
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AKKAPEDDI, PRASAD R

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| ART UNIT | PAPER NUMBER |
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2871

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding..

H.A

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/582,864 | TAKAHATA ET AL. | |
| | Examiner | Art Unit | |
| | Prasad R Akkapeddi | 2871 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-39 and 41-52 is/are pending in the application.
- 4a) Of the above claim(s) 28-39 and 45-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27 and 41-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/03/2004 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claim 27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 27, 41- 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sawai et al. (Sawai) (U.S. Patent No. 6,020,945) in view of Kubo et al. (Kubo) (6,456,279).

a. As to claim 27: Sawai discloses a touch-input type liquid crystal display device with an upper polarizer (6), a lower polarizer (2), a transparent touch panel (12) disposed between the upper polarizer (6) and the lower polarizer (2), an upper optical phase difference film (7), an electrode portion (ITO film), a stationary electrode portion (ITO film) and a lower optical phase difference film (11) and a liquid crystal display (1), wherein a space is interposed between the upper optical phase difference film (7) and the lower optical phase difference film (11), the transparent touch panel is disposed between the upper polarizer and the liquid crystal display (Fig. 9), the upper and lower optical phase difference film is capable of providing a $1/4$ wavelength phase delay to light, incident thereon, having a center wavelength within a visible region (550 nm) (col. 7, lines 9-16) and (col. 8, line 3).

In Fig. 2, Sawai also discloses the various angles such as an angle formed by an optical axis of the upper optical phase difference film (7) and a polarization axis of the upper polarizer (6) is about 45° and an angle formed by an optical axis of the lower optical phase difference film (11) and linearly polarized light to be outputted from the liquid crystal display (1) is about 45° and an angle formed by the optical axis of the upper optical phase difference film and the optical axis of the lower optical phase difference film is about 90° (col. 7, lines 28-29), and an angle formed by the polarization axis of the upper polarizer (6) and linearly polarized light to be outputted from the liquid crystal display is

about 90 ° (Fig. 2). In Fig. 14, Sawai discloses that the liquid crystal display is disposed between the transparent touch panel and the lower polarizer (140).

Sawai does not explicitly state a movable electrode portion on a lower surface of the upper phase difference film. However, Sawai discloses an ITO film as an electrode on the lower portion of the upper phase difference film (7) which is a part of the touch panel.

Since the device is a touch panel and the ITO film is rather flexible that can move under pressure. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt the ITO film as a movable electrode because of the thinness of the structure and such the function is inherent.

Sawai does not disclose a re-peel sheet.

Kubo in disclosing a liquid crystal display device with a touch panel, discloses a double-sided adhesive tape that fixes the members (40 A and 40B0 of the touch panel to the liquid crystal display device (1A) (see Fig. 1) and (col. 14, lines 27-35) and goes on to teach that by using the double sided adhesive tape, it is possible to peel the members (1A, i.e., the liquid crystal display) and (40A and 40B, i.e., the touch panel) after bonding them together, as recited in the instant claim 27.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt the double sided adhesive layer as disclosed by Kubo to the display device of Sawai to possibly reproduce the

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liquid crystal display panel, the illumination device and the input device (i.e., the touch panel) if they are mistakenly fixed (col. 14, lines 31-35).

b. As to claims 41,42 and 44: Sawai also discloses a hard coating having low moisture permeability (Fig. 3), a PET film (a transparent adhesive layer i.e., hard coating) bonded to the ITO film and anti reflective coatings (col. 1, line 52).

5. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sawai in view of Kubo and further in view of Sugiyama et al. (Sugiyama) (U.S.Patent No. 5,498,657).

Sawai in view of Kubo does not disclose an antifouling processed layer.

Sugiyama in disclosing a fluorine containing polymer composition, discloses that such a composition could be used as an antifouling layer for devices such as touch-panels, liquid crystals etc. (col. 15, lines 37-59).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to adapt the polymer composition as disclosed by Sugiyama to the device of Sawai when modified by Kubo for improving mechanical properties, scratch resistance and creep resistance (col. 10, lines 60-67) and (col. 11, lines 1-5).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prasad R Akkapeddi whose telephone number is 571-272-2285. The examiner can normally be reached on 7:00AM to 5:30PM M-Th.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert H Kim can be reached on 571-272-2293. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RA

Prasad R Akkapeddi, Ph.D
Examiner
Art Unit 2871



ROBERT H. KIM
SUPERVISORY PATENT EXAMINER
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